

Serbia, for examining functions and drawing their graphs. In 2012 the authors decided to improve the collaborative learning introducing GeoGebra application. Small four member groups were formed by using Kagan’s (1994) principles. Two groups of students, the experimental, and the control one were observed. The students in the experimental group learned with the help of GeoGebra, and the students in the control group learned without using GeoGebra.

BETTINA TÓTH: *Modeling competency and steps of modeling*

The word ‘modeling’ is certainly familiar for all, and it also bears a different meaning for everyone. In my presentation I will talk about a chosen interpretation of mathematical modeling, and about the components of modeling competency. I will present the case study related to the aforementioned competencies, which was carried out in an eight-grade secondary school. Students of the school have solved modeling tasks in a way that they have not encountered similar exercises beforehand. I will talk about the most commonly chosen solving methods, and about typical errors, deficiencies as well.

ADRIENN VINCZÉNÉ-VARGA: *Software techniques in engineering computations*

It is natural to use free mathematical software packages in engineering computations. The typical capabilities are numeric and symbolic computations, algebraic, trigonometric and matrix functions, graphics capabilities, conditional programming, flexible and easy to use interface. From the viewpoint of mathematical education of engineers we are also motivated to pique our students’ interest in free mathematical software packages. At the Department of Basic Technology Skills (Faculty of Engineering, University of Debrecen) a special material has been developed to propagate the use of such tools as one of the up to date competencies in many areas of science, technology and engineering. The talk is devoted to present a preview of Software techniques in engineering computations.

List of abstracts of posters

TÜNDE KÁNTOR: *Documents to the life and career of György Maróthi (1715-1744)*

The aim of this poster is to present original documents concerning Maróthi’s life and career. In the new and easy available documents (Websites, Wikipedia, lexicons) sometimes we find false information. For a long time the date of Maróthi’s birth was not known exactly. Therefore some books mentioned only